MONITOR WELL PRE-SPUD PROPOSAL

1) WELL NAME/NUMBER: BLM-9

2) PROPOSED LOCATION: (a) General (on or off-site) Off-site
(attach map) Site Area BLM land
(b) Sect 33 Twnshp 20S Rng 3E NW ¼ SW ¼ SE ¼

N: 228600 E: 406189 *

3) WELL PARAMETERS:
(a) Est. total depth 470 (ft) (b) Est. ground elevation 4603 ft
(c) Anticipated stratigraphy:
Santa Fe Group from 0 ' to 460 ' (depth)
Orejon Andesite from 460 ' to TD ' (depth)
_____ from _____ ' to _____ ' (depth)
(d) Anticipated water bearing horizon(s):
Santa Fe Group at 390 ' (depth)
_____ at _____ ' (depth)
(e) Anticipated static water level 390 ' (depth)

4) WELL PURPOSE/JUSTIFICATION (attach maps and table if needed):
Monitor well located within the off-site plume at a known soil gas anomaly (Freon-113 and Freon-11 maximum).

5) PROPOSED DRILLING PARAMETERS:
(a) Drilling method(s): (air/foam/mud rotary/auger/etc.)
Air-foam rotary ' from 0 ' to TD ' (depth)
_____ ' from _____ ' to _____ ' (depth)
_____ ' from _____ ' to _____ ' (depth)

Air-foam method: "Quik-Foam" surfactant/water mixture used in conjunction with filtered compress air.

Mud-rotary method: Bentonite mud/water mixture.

* 2325' west of the southeast corner of T20S R3E Section 33 and 800' north of well road.

(b) Lithology sampling - collect sample every:
5' intervals Method Grab from 0 ' to TD (depth)
Core type 2" Christiansen from 420 ' to 430 ' (depth)**
2" Christiansen from _____' to _____' (depth)
2" Christiansen from _____' to _____' (depth)

(c) Drilling rig type: Chicago Pneumatic rotary rig

(d) Anticipated drilling additive(s): None
Water source NASA Quality checked by GC (method)

(e) Decontamination/Quality Assurance:
Clean equipment by steam (method) prior to every well
Clean tools by steam (method) prior to every well
Other QA procedures Air filtering/monitoring, periodic steam cleaning of tools/sampling equipment when necessary

(f) Drilling company: Larjon Drilling
address: P.O. Box 925, Las Cruces, New Mexico 88047
Company representative: Larry Johnson Phone 505-526-8672

6) PROPOSED BOREHOLE GEOPHYSICS

(a) Survey type: GR - Neutron from 0 ' to TD (depth)
Survey type: GR-Den-Res-Cal from 0 ' to TD (depth)
Survey type: 16"-40" E-Log from TD ' to W.L. (depth)

(b) Geophysical company: Southwest Survey
address: 4200 Skyline Drive, Farmington, NM 87401
Company representative: Don Pearson Phone 505-325-8531

7) PROPOSED WELL COMPLETION DESIGN/MATERIALS

(a)

Casing:	Material	Diameter	From	To	Comments
Temporary					
Surface	steel	10"	0	100'	
Blank (riser)	stainless	4"	0	+3'	
Screen (10')	stainless	4"	NA	NA	0.02"
Completion Pipe	stainless	4"	0	TD	*
Silt trap	stainless	4"	to 5' below screen		
Protective Cap	stainless	4"	on top with lock		

NA = Data not available at this time
* for deep completions (450 feet or more)
** core saturated alluvium if possible

(b) Filter pack:

	Primary	Secondary
Material type	Prewashed sand	Prewashed sand
Grain Size	8-14/10-20 mix	16/40
Est. length (thick)	20 feet	2-3' above gravel pack

(c) Seal - Upper: Bentonite Thickness 5 feet above upper 16/40 sand

Lower: Bentonite Thickness 5 feet below lower 16/40 sand

(d) Grout - Material 5% Bentonite cement from above completion zone to the surface

8) PROPOSED WELL DEVELOPMENT

(a) Development method Surge and pump

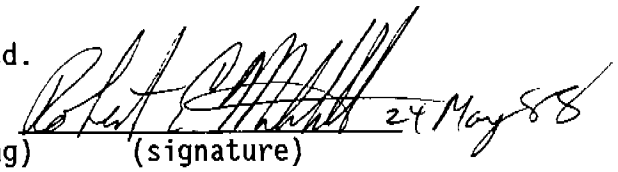
Equipment Pulling unit with bailer & submersible pump

(b) Anticipated flow rate 5-15 gpm Duration until adequately devel.

(c) Company providing service Larjon

9) WELL AUTHORIZATION

(a) Proposed by Geoscience Consultants, Ltd.

(b) Authorized Robert Mitchell (name) NASA (representing)  (signature) 24 May 88

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